

(FILE 'HOME' ENTERED AT 17:33:01 ON 16 SEP 2005)

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 17:33:23 ON 16 SEP 2005

L1 15990 S (DISPERSED PHASE) OR (ONE PHASE)  
L2 19 S L1 (S) MICROPARTICLE?  
L3 0 S L2 (P) (PEG OR (POLYETHYLENE GLYCOL))  
L4 0 S (DEXTRAN? (S) POLMER) (S) POLYALIPHATIC  
L5 1 S DEXTRAN? (S) POLYALIPHATIC  
L6 0 S MICROPARTICLE? (S) POLYMER (S) POLYALIPHATIC  
L7 3522 S MICROPARTICLE? (S) POLYMER  
L8 0 S L7 (P) POLYALIPHATIC  
L9 680 S MICROPARTICLE? (S) EVAPORAT?  
L10 4 S L9 (S) DEXTRAN?  
L11 992 S MICROPARTICLE? (P) EVAPORAT?  
L12 11 S L11 (P) DEXTRAN?  
L13 0 S L11 (P) POLYALIPHATIC  
L14 11 DUP REM L2 (8 DUPLICATES REMOVED)  
L15 1 DUP REM L10 (3 DUPLICATES REMOVED)  
L16 5 DUP REM L12 (6 DUPLICATES REMOVED)

IN Orly, Isabelle; Levy, Marie Christine; Perrier, Eric

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

TI Fabrication of microparticles in emulsion by chemical  
modification of the dispersed phase after  
emulsification

AB The microparticles, esp. microcapsules, are produced by prepn.  
of an emulsion of a soln. or mixt. in a dispersing liq. in which the  
substance or mixt. is substantially insol., and adding to the  
dispersed phase a chem. agent substantially insol. in  
the dispersing liq. to cause a chem. or physicochem. reaction in the  
dispersed phase responsible for formation of  
microparticles which are then isolated.

AU Berdonosov, S. S.; Baronov, S. B.; Kuz'micheva, Yu. V.; Berdonosova, D.  
G.; Melikhov, I. V.

SO Rossiiskii Khimicheskii Zhurnal (2001), 45(1), 35-42

CODEN: RKZHEZ; ISSN: 1024-6215

TI Dispersed solid phases from hollow spherical and tubular inorganic  
microparticles

AB The models for formation of solid dispersions from supersatd. liq. or  
vapor media with an assumption that the formed polydispersed solids  
consist of discrete microparticles and the exptl. data from the  
last 10-15 yr that show the formation of hollow particles and complex  
texturing of the dispersed phase are discussed. The  
size of the hollow particles is 5-10 .mu.. The spontaneous formation of  
the complex textured hollow, tubular, few cm long particles is shown.

AU Choi, Hyoung J.; Cho, Yun H.; Cho, Min S.; Jhon, Myung S.

SO Polymeric Materials Science and Engineering (2001), 84, 505-506

CODEN: PMSEDG; ISSN: 0743-0515

TI Electrorheology of polyaniline-coated poly(methyl methacrylate)  
microsphere suspensions in silicone oil

AB Monodisperse, spherical microparticles of polyaniline  
(PA)-coated poly(Me methacrylate) having core-shell structure were prepd.  
for use as the dispersed phase of ER [electrorheol.]  
fluid systems in silicone oil. Three different thicknesses of  
semiconductive PA shell were used. The elec. polarization of ER fluids is  
the main cause of electrostatic interactions between particles. The  
particles provide excellent ER effect, although only a small amt. of PA  
coating is used on the insulating PMMA core.

- AU Coombes A G; Tasker S; Lindblad M; Holmgren J; Hoste K; Toncheva V;  
Schacht E; Davies M C; Illum L; Davis S S  
SO Biomaterials, (1997 Sep) 18 (17) 1153-61.  
Journal code: 8100316. ISSN: 0142-9612.
- TI Biodegradable polymeric microparticles for drug delivery and vaccine  
formulation: the surface attachment of hydrophilic species using the  
concept of poly(ethylene glycol) anchoring segments.
- AB Poly(ethylene glycol)-dextran (PEG-DEX) conjugates have been  
used as a combined stabilizer and surface modifier to produce resorbable  
poly(DL-lactide-co-glycolide) (PLG) microparticles by an  
emulsification/solvent evaporation technique. The use of PEG or  
dextran polymers alone was incapable of producing microparticles.  
Particle size measurements revealed smaller mean particle sizes (480 nm)  
and improved polydispersity when using a 1.2% PEG substituted conjugate  
relative to a 9% substituted material (680 nm). PLG microparticles  
modified by post-adsorbed PEG-DEX conjugates flocculated in 0.01 M salt  
solutions, whereas PLG microparticles prepared using PEG-DEX as a  
surfactant were stable in at least 0.5 M NaCl solutions. Surface  
modification of PLG microparticles was confirmed by zeta potential  
measurements and surface analysis using X-ray photoelectron spectroscopy.  
The presence of surface exposed dextran was confirmed by an immunological  
detection method using a dextran-specific antiserum in an enzyme-linked  
immunosorbent assay. The findings support a model in which the PEG  
component of the PEG-DEX conjugate provides an anchor to the microparticle  
surface while the dextran component extends from the particle surface to  
contribute a steric stabilization function. This approach offers  
opportunities for attaching hydrophilic species such as targeting moieties  
to biodegradable microparticles to improve the interaction of drug  
carriers and vaccines with specific tissue sites.
- AU Engelmann, G.; Jobmann, M.; Rafler, G.  
SO Industrial Crops and Products (2004), 20(1), 37-48  
CODEN: ICRDEW; ISSN: 0926-6690
- TI Dextran carbamates-materials for microencapsulation
- AB Hydrophobic dextran-N-alkyl carbamates were synthesized as wall  
materials for microparticles with core/shell structure, using  
the hydrophilic indicator phenolphthalein as core material. The  
performance of the carbamates was possible by adding alkylisocyanates to  
the hydroxy-groups of the dextrans. The syntheses were  
carried out by using homogeneous reaction conditions with DMSO as solvent.  
Two different av. mol. wts. of the dextrans (9900 and 505,000  
g/mol), a theor. degree of substitution (DS) of the carbamates, DS=2 and  
different alkyl chains with 7, 11 and 18 carbon atoms were chosen as  
structural features of the dextran carbamates. Both intrinsic  
viscosities and the soly. of the dextran derivs. in selected  
org. solvents were investigated. Addnl., the av. mol. wts. were analyzed  
by gel permeation chromatog. The prepn. of microparticles with  
core/shell structures was performed by a solvent evapn.  
technique. The release of phenolphthalein was analyzed by suspending the  
particles in alk. soln. The dependence of the described structural  
features on the releasing properties of the manufd. microparticles  
was discussed.